

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (presently amended): A method of partitioning ~~endogenous~~ cellular mRNA-protein (mRNP) complexes, comprising:

contacting a biological sample comprising a mRNA-protein (mRNP) complex with at least one ligand that specifically binds at least one component of the mRNP complex;

separating the mRNP complex by binding the ligand with a binding molecule specific for the ligand, wherein the binding molecule is attached to a solid support;

and then

collecting the mRNP complex by removing the mRNP complex from the solid support.

Claim 2 (previously presented): The method according to Claim 1, wherein the biological sample comprises a cell culture or a cell extract.

Claim 3 (previously presented): The method according to Claim 1, wherein the biological sample comprises whole tissue.

Claim 4 (previously presented): The method according to Claim 1, wherein the biological sample comprises a whole organ.

Claim 5 (previously presented): The method according to Claim 1, wherein the biological sample comprises a tumor.

Claim 6 (previously presented): The method according to Claim 1, wherein the biological sample comprising a tumor cell or a tumor cell extract.

Claim 7 (previously presented): The method according to Claim 1, wherein the biological sample comprises a population of neurons.

Claim 8 (previously presented): The method according to Claim 1, wherein the ligand is an antibody.

Claim 9 (previously presented): The method according to Claim 1, wherein the ligand is an antibody isolated using the serum of a subject with cancer.

Claim 10 (previously presented): The method according to Claim 1, wherein the ligand is an antibody isolated using the serum of a subject with an autoimmune disorder.

Claim 11 (previously presented): The method according to Claim 1, wherein the binding molecule is an antibody.

Claim 12 (previously presented): The method according to Claim 1, wherein the binding molecule is selected from the group consisting of Protein A, Protein G, and streptavidin.

Claim 13 (previously presented): The method according to Claim 1, wherein the component of the mRNP complex is nucleic acid.

Claim 14 (previously presented): The method according to Claim 1, wherein the component of the mRNP complex is RNA.

Claim 15 (previously presented): The method according to Claim 1, wherein the component of the mRNP complex is mRNA.

Claim 16 (previously presented): The method according to Claim 1, wherein the component of the mRNP complex is mature mRNA.

Claim 17 (previously presented): The method according to Claim 1, wherein the component of the mRNP complex is a RNA-binding protein.

Claim 18 (previously presented): The method according to Claim 1, wherein the component of the mRNP complex is a RNA-associated protein.

Claim 19 (previously presented): The method according to Claim 18, wherein the RNA-associated protein associates with the mRNP complex with a K_d of about 10^{-6} to about 10^{-9} .

Claim 20 (previously presented): The method according to Claim 18, wherein the RNA-associated protein associates with the mRNP complex with a K_d of about 10^{-7} to about 10^{-9} .

Claim 21 (previously presented): The method according to Claim 18, wherein the RNA-associated protein associates with the mRNP complex with a K_d of about 10^{-8} to about 10^{-9} .

Claim 22 (previously presented): The method according to Claim 1, wherein the component of the mRNP complex is selected from the group consisting of carbohydrates, lipids, and vitamins.

Claim 23 (presently amended): The method according to Claim 1, further comprising the step of identifying the mRNA bound within the mRNP complex by separating the mRNA from the mRNP complex, obtaining a cDNA of the mRNA and then sequencing the cDNA.

Claim 24 (presently amended): The method according to Claim 23, wherein said identifying step is carried out on a [[cDNA]] microarray.

Claim 25 (previously presented): The method according to Claim 1, wherein the ligand is an ELAV/Hu protein selected from the group consisting of HuA, HuB, HuC and HuD.

Claim 26 (previously presented): The method according to Claim 1, wherein the ligand is an antibody specific for at least one component of the mRNP complex, and the mRNP complex is separated by immunoprecipitation.

Claim 27 (previously presented): The method according to Claim 1, wherein a plurality of ligands is contacted with the biological sample to isolate a plurality of mRNP complexes.

Claim 28 (previously presented): The method according to Claim 1, further comprising cross-linking the mRNP complex prior to contacting the mRNP complex with the ligand.

Claim 29 (previously presented): The method according to Claim 1, further comprising cross-linking the ligand with the mRNP complex after contacting the mRNP complex with the ligand.

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Claims 30-33 (canceled).